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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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SOLAIMAN, SHIREEN I

ART UNIT	PAPER NUMBER
2175	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/734,887	BHARAT ET AL.
	Examiner	Art Unit
	Shireen I Solaiman	2175

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
 THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 12/13/00.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-22 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>4,5</u> . | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed 07/08/02 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because the article “Authoritative resources in a hyperlinked environment” by Jon Kleinberg is also included in the previous information disclosure statement. It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609 ¶ C(1).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (e) the invention was described in–
(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

3. Claims 1, 2 and 6-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Conklin et al. (U.S. Patent # 6,363,378).

As to claims 1, 8 and 9, Conklin et al. discloses a method, a system and a computer-readable medium containing instructions for controlling at least one processor for providing search results, comprising:

receiving a search query (see column 1, lines 58-59);
retrieving one or more objects in response to the search query (see column 1, lines 34-50, retrieved documents and see fig. 1 retrieval system 100);
determining whether the search query corresponds to at least one query theme of a group of query themes (see column 3, lines 25-30 and column 4, lines 1-8);
ranking the one or more objects based on a result of the determination (see column 3, lines 1-24, ranking for the query feedback terms); and
providing the ranked one or more objects (see column 3, lines 1-24, the query feedback terms are then displayed to the user in the order ranked).

As to claim 2, Conklin et al. discloses wherein the objects include web pages (see column 2, lines 10-11, online world wide web).

As to claim 6, Conklin et al. discloses wherein the determining includes: determining whether the search query corresponds to a query rule associated with each query theme (see column 6, lines 1-67, query rule reads on cluster analysis).

As to claim 7, Conklin et al. discloses wherein each query theme is classified into a first set of topics(see column 6, lines 52-64, a focal category is a concept that best reflects the center of conceptual proximity of the topics in a cluster, see fig.6 France is in first set of topics), and wherein the determining includes: classifying the search query into a second set of topics (see fig.6 Places of Interest is in second set of topics), and determining that the search query corresponds to a query theme when the second set of topics relates to the first set of topics associated with that query theme (see fig.6 Eiffel Tower can be reached from both sets of topic through a query).

As to claim 10, Conklin et al. discloses server (see fig. 8) comprising:
a memory configured to store instructions and a group of query themes (see fig. 8, Main memory 1010); and
a processor configured to execute the instructions (see fig. 8, Processor unit 1005) to obtain a search query that includes at least one search term, retrieve one or more objects based on the at least one search term(see column 1, lines 34-50, retrieved documents and see fig. 1 retrieval system 100), determine whether the search query corresponds to at least one of the group of query themes(see column 3, lines 25-30 and column 4, lines 1-8), rank the one or more objects based on whether the search query corresponds to at least one of the group of query themes(see column 3, lines 1-24, ranking for the query feedback terms); and provide the ranked one or more objects (see column 3, lines 1-24, the query feedback terms are then displayed to the user in the order ranked).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3-5 and 11-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Conklin et al. (U.S. Patent # 6,363,378) in view of Chakrabarti et al. (U.S. Patent # 6,356,899).

As to claim 3, Conklin et al. does not teach determining whether any of the one or more objects relates to a list of favored and non-favored sources.

Chakrabarti et al. teaches determining whether any of the one or more objects relates to a list of favored and non-favored sources (see column 1, lines 30-50, favored reads on example pages and non-favored sources reads on stop pages).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Conklin et al. to include determining whether any of the one or more objects relates to a list of favored and non-favored sources.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Conklin et al. by the teachings of Chakrabarti et al. to include determining whether any of the one or more objects relates to a list of favored and non-favored sources because "preferred" information elements are considered to have higher

relevance to some specific subject matter (see column 2, lines 53-55) and non-favored sources may adversely affects relevance computation accuracy (see column 3, lines 18-19).

As to claim 4, Conklin et al. as modified discloses wherein the ranking includes determining a score for those objects that are unrelated to the list of favored and non-favored sources using a first group of parameters (see column 7, lines 29-67 and column 8, lines 1-46, determines raw and descendent weight).

Conklin et al. as modified does not teach wherein the ranking includes: determining a score for those objects that relate to the list of favored or non-favored sources using the first group of parameters and an editorial opinion parameter; and ranking the objects based on determined scores;

Chakrabarti et al. teaches wherein the ranking includes: determining a score for those objects that relate to the list of favored or non-favored sources (see column 19, lines 1-31 and column 20, lines 7-51) using the first group of parameters and an editorial opinion parameter(editorial opinion parameter reads on authority weight); and ranking the objects based on determined scores (see column 19, lines 30-31).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Conklin et al. as modified wherein the ranking includes: determining a score for those objects that relate to the list of favored or non-favored sources using the first group of parameters and an editorial opinion parameter; and ranking the objects based on determined scores.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Conklin et al. as modified by the teachings of Chakrabarti et al. wherein the ranking includes: determining a score for those objects that relate to the list of favored or non-favored sources using the first group of parameters and an editorial opinion parameter; and ranking the objects based on determined scores because weights for respective links may be increased to reflect the significance of the link.

As to claim 5, Conklin et al. as modified does not teach wherein the editorial opinion parameter causes the rank of those objects corresponding to favored sources to be increased and a rank of those objects corresponding to non-favored sources to be decreased.

Chakrabarti et al. teaches wherein the editorial opinion parameter causes the rank of those objects corresponding to favored sources to be increased (see column 2, lines 53-55, higher) and a rank of those objects corresponding to non-favored sources to be decreased (see column 2, lines 53-55 and see fig. 14, delete stop pages from supplemented initial set, 295).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Conklin et al. as modified wherein the editorial opinion parameter causes the rank of those objects corresponding to favored sources to be increased and a rank of those objects corresponding to non-favored sources to be decreased.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Conklin et al. as modified by the teachings of Chakrabarti et al. wherein the editorial opinion parameter causes the rank of those objects corresponding to favored sources to be increased and a rank of those objects corresponding to non-favored sources

to be decreased because authority weight of link within a page may be increased/decreased beyond a default value to reflect relevance (see column 9, lines 30-35).

As to claim 11, Conklin et al. discloses method used in ranking search results, comprising: developing one or more query themes (see column 3, lines 25-30 and column 4, lines 1-8).

Conklin et al. does not teach determining an editorial opinion parameter for use in ranking search results identifying, for each query theme, a first set of objects as favored objects; identifying, for each query theme, a second set of objects as non-favored objects; and determining an editorial opinion parameter for each of the objects in the first and second sets.

Chakrabarti et al. teaches determining an editorial opinion parameter for use in ranking search results (editorial opinion parameter reads on authority weight) identifying, for each query theme (see column 12, lines 4-23, theme reads on hierarchical information classification), a first set of objects as favored objects (see fig. 14, Were example authorities specified, 289); identifying, for each query theme (see column 12, lines 4-23, theme reads on hierarchical information classification), a second set of objects as non-favored objects (see fig. 14, Were stop pages specified, 289); and determining an editorial opinion parameter for each of the objects in the first (see column 8, lines 35-50) and second sets (see fig. 14, delete stop pages from supplemented initial set, 295).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Conklin et al. to include determining an editorial opinion parameter for use in ranking search results identifying, for each query theme, a first set

of objects as favored objects; identifying, for each query theme, a second set of objects as non-favored objects; and determining an editorial opinion parameter for each of the objects in the first and second sets.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Conklin et al. by the teachings of Chakrabarti et al. to include determining an editorial opinion parameter for use in ranking search results identifying, for each query theme, a first set of objects as favored objects; identifying, for each query theme, a second set of objects as non-favored objects; and determining an editorial opinion parameter for each of the objects in the first and second sets because the exact authority value for a page is not as significant as approximating the page's authority relative values for ranking purposes (see column 31, lines 11-14).

As to claim 12, Conklin et al. as modified discloses wherein the determining includes: determining whether the search query corresponds to a query rule associated with each query theme (see column 6, lines 1-67, query rule reads on cluster analysis).

As to claim 13, Conklin et al. as modified discloses determining, for each query theme, one or more topics for determining whether a search query satisfies the respective query theme (see column 6, lines 52-64, a focal category is a concept that best reflects the center of conceptual proximity of the topics in a cluster).

As to claim 14, Conklin et al. as modified discloses wherein the one or more topics are selected from at least one hierarchical directory theme (see column 6, lines 22-32).

As to claim 15, Conklin et al. as modified does not teach wherein the first and second sets of objects are sets of web sites.

Chakrabarti et al. teaches wherein the first and second sets of objects are sets of web sites sources (see column 1, lines 30-50, first set reads on example pages and second set reads on stop pages).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Conklin et al. as modified wherein the first and second sets of objects are sets of web sites.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Conklin et al. as modified by the teachings of Chakrabarti et al. wherein the first and second sets of objects are sets of web sites because they represents a valuable and important information resource, including literally hundreds of millions of documents accessed by tens of millions of users daily (see column 12, lines 63-66).

As to claim 16, Conklin et al. as modified does not teach wherein the identifying a first set of objects includes: identifying the first set of objects using host names.

Chakrabarti et al. teaches wherein the identifying a first set of objects includes: identifying the first set of objects using host names (see column 6, lines 2-30 and host names reads on web pages).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Conklin et al. as modified wherein the identifying a first set of objects includes: identifying the first set of objects using host names.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Conklin et al. as modified by the teachings of Chakrabarti et al. wherein the identifying a first set of objects includes: identifying the first set of objects using host names because they represents a valuable and important information resource, including literally hundreds of millions of documents accessed by tens of millions of users daily (see column 12, lines 63-66).

As to claim 17, Conklin et al. as modified does not teach wherein the identifying a first set of objects includes identifying the first set of objects using one or more Uniform Resource Locator (URL) prefixes.

Chakrabarti et al. teaches wherein the identifying a first set of objects includes identifying the first set of objects using one or more Uniform Resource Locator (URL) prefixes (see column 17, lines 37-48, links can be URL, web sites or host names).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Conklin et al. as modified wherein the identifying a first set of objects includes: identifying the first set of objects using one or more Uniform Resource Locator (URL) prefixes.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Conklin et al. as modified by the teachings of Chakrabarti

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et al. wherein the identifying a first set of objects includes: identifying the first set of objects using one or more Uniform Resource Locator (URL) prefixes because they represents a valuable and important information resource, including literally hundreds of millions of documents accessed by tens of millions of users daily (see column 12, lines 63-66).

As to claim 18, Conklin et al. as modified discloses wherein the identifying a first set of objects includes: classifying each query theme into a set of topics from a hierarchical directory (see column 6, lines 52-64, a focal category is a concept that best reflects the center of conceptual proximity of the topics in a cluster), and identifying host names listed under the set of topics as being in the first set of objects for that query theme (see fig.2 document hit list, 202 and see column 2, lines 10-11, online world wide web surfer is the user implies web sites).

As to claim 19, Conklin et al. as modified does not teach wherein the editorial opinion parameter causes a rank of an object to be increased or decreased based on whether the object is in the first or second set.

Chakrabarti et al. teaches wherein the editorial opinion parameter causes the rank of those objects corresponding to favored sources to be increased (see column 2, lines 53-55, higher) and a rank of those objects corresponding to non-favored sources to be decreased (see column 2, lines 53-55 and see fig. 14, delete stop pages from supplemented initial set, 295).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Conklin et al. as modified wherein the editorial

opinion parameter causes the rank of those objects corresponding to favored sources to be increased and a rank of those objects corresponding to non-favored sources to be decreased.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Conklin et al. as modified by the teachings of Chakrabarti et al. wherein the editorial opinion parameter causes the rank of those objects corresponding to favored sources to be increased and a rank of those objects corresponding to non-favored sources to be decreased because "preferred" information elements are considered to have higher relevance to some specific subject matter (see column 2, lines 53-55) and non-favored sources may adversely affects relevance computation accuracy (see column 3, lines 18-19).

As to claim 20, Conklin et al. discloses computer-readable medium containing one or more instructions for controlling at least one processor (see fig. 8, Processor unit 1005) to perform a method for use in ranking search results, the method comprising: identifying, for each of a group of search query themes(see column 4, lines 1-8, the query theme vector presents a thematic profile of the content in the query).

Conklin et al. does not teach a first set of objects as favored objects; a second set of objects as non-favored objects; and determining an editorial opinion parameter for each of the objects in the first and second sets of objects.

Chakrabarti et al. teaches determining a first set of objects as favored objects; a second set of objects as non-favored objects (see column 1, lines 30-50, first set reads on example pages and second set reads on stop pages); and determining an editorial opinion parameter for each of

the objects in the first and second sets of objects (see column 2, lines 53-55 and see fig. 14, delete stop pages from supplemented initial set, 295).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Conklin et al. to include a first set of objects as favored objects; a second set of objects as non-favored objects; and determining an editorial opinion parameter for each of the objects in the first and second sets of objects.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Conklin et al. by the teachings of Chakrabarti et al. to include a first set of objects as favored objects; a second set of objects as non-favored objects; and determining an editorial opinion parameter for each of the objects in the first and second sets of objects because "preferred" information elements are considered to have higher relevance to some specific subject matter (see column 2, lines 53-55) and non-favored sources may adversely affects relevance computation accuracy (see column 3, lines 18-19).

As to claim 21, Conklin et al. discloses computer-readable medium containing a data structure (see abstract, lines 15-17, documents) comprising:
a query theme field that stores at least one query theme (see column 4, lines 1-8, the query theme vector presents a thematic profile of the content in the query).

Conklin et al. does not teach a favored and non-favored sources field that stores information identifying favored and non-favored web sites for each query theme in the query theme field; and an editorial parameter field that stores an editorial parameter for each favored and non-favored web site identified in the favored and non-favored sources field.

Chakrabarti et al. teaches a favored and non-favored sources field that stores information identifying favored (see fig. 14, Were example authorities specified, 289) and non-favored web sites (see fig. 14, Were stop pages specified, 289) for each query theme in the query theme field (query theme field reads on classification); and an editorial parameter field that stores an editorial parameter for each favored and non-favored web site identified in the favored and non-favored sources field (see column 1, lines 30-50, control parameters).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Conklin et al. to include a favored and non-favored sources field that stores information identifying favored and non-favored web sites for each query theme in the query theme field; and an editorial parameter field that stores an editorial parameter for each favored and non-favored web site identified in the favored and non-favored sources field.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Conklin et al. by the teachings of Chakrabarti et al. to include a favored and non-favored sources field that stores information identifying favored and non-favored web sites for each query theme in the query theme field; and an editorial parameter field that stores an editorial parameter for each favored and non-favored web site identified in the favored and non-favored sources field because "preferred" information elements are considered to have higher relevance to some specific subject matter (see column 2, lines 53-55) and non-favored sources may adversely affects relevance computation accuracy (see column 3, lines 18-19).

As to claim 22, Conklin et al. as modified discloses wherein the at least one query theme includes at least one of a query theme rule and a set of topics from one or more hierarchical directories (see column 6, lines 1-67, query theme rule reads on cluster analysis).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kleinberg et al. (U.S. Patent # 6,112,202) discloses automatically identifying the most authoritative Web pages from a large set of hyperlinked Web pages. Kleinberg explains his method applies to the cases where one has a page whose content is of interest, and desires to find other pages which are authoritative with respect to the content of the page of interest by conducting a search based upon a query composed from the content of the page of interest; expanding the group of pages initially retrieved with pages that are linked to the pages initially retrieved; and finally, iteratively computing the relevance of the pages retrieved based upon the "weights" for the respective page link structures, his method fails to consider the interactive creation by a user of a database structure for the information, or optimization of the relevance computation by removal of spurious factors which adversely effect accuracy. Still further, Kleinberg fails to consider inclusion and/or exclusion, respectively, of desirable and undesirable information elements to influence the results of computation.

Rose et al. (U.S. Patent # 5,724,567) discloses storing items of information in an unstructured global database. When a user requests access to the system, the system delivers to that user an identification of only those items of information which are believed to be relevant to the user's interest. The determination as to the items of information that are relevant to a user is carried out by ranking each available item in accordance with any one or more techniques. In

one approach, the content of each document is matched with an adaptive profile of a user's interest. In another approach, a feedback mechanism is provided to allow users to indicate their degree of interest in each item of information. These indications are used to determine whether other users, who have similar or dissimilar interests, will find a particular item to be relevant.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shireen I Solaiman whose telephone number is 703-305-5893. The examiner can normally be reached on 8-6:30 M-Thur.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici can be reached on 703-305-3830. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7239 for regular communications and 703-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

SIS
October 8, 2002

Charles Rones
CHARLES RONES
PRIMARY EXAMINER